

Listing of Claims:

1. (Currently Amended) ~~A method for automatically Automatic description method for~~
~~describing~~ an unknown multimedia object in which the unknown object is associated with
~~several types a plurality~~ of reference multimedia objects ~~each time~~ depending on a probability of
membership to each considered type ~~of said plural reference multimedia objects such that~~
~~multimedia objects having memberships in each considered type of said plural reference~~
~~multimedia objects and a lower affinity to elected multimedia objects having memberships in~~
~~each type of said plural reference multimedia objects are excluded, (G), the method including a~~
~~step consisting the method comprising the steps of:~~

measuring at least one physical characteristic ~~on~~ of the unknown
multimedia object (F) and comparing ~~it the~~ at least one physical characteristic of
the unknown multimedia object with measurements of characteristics which best
represent representing the each type of said plural reference multimedia objects;
~~types, the method also including the step (H) consisting of~~

using at least one probabilistic relation for each type of said plural
reference multimedia objects to obtain giving a probability that the unknown
multimedia object is a member of membership to the type of said plural reference
multimedia objects considered ~~as a function of the~~ based on a result of the
comparison of the at least one measured physical characteristics of the unknown
object and to the type measurements of the characteristics which best represent
each type of said plural reference multimedia objects;[[,]] ~~the method also~~
~~including the step consisting of~~

electing the multimedia objects having memberships in each type of said
plural reference multimedia objects which form a majority of probabilities

associated with each type of said plural reference multimedia objects considered and which are co-designated by an associated affinity relation using obtained probabilities that the unknown multimedia objects are members of membership to the different types of said plural reference multimedia objects thus obtained in combination with a series of affinity relations between each type of said plural reference multimedia objects types, so as to elect memberships that are majority in probability and are also co-designated by their affinity relation, so as to exclude such that the multimedia objects having memberships to in each considered type of said plural reference multimedia objects and with a the lower affinity with to the elected multimedia objects having memberships in each type of said plural reference multimedia objects types are excluded.

2. (Currently Amended) ~~Description~~ The method according to claim 1, characterized in that it includes further comprising a the preliminary step consisting of:

defining ~~the~~ reference characteristics of a type of said plural reference multimedia objects starting from a group of multimedia objects presumed to represent each type of said plural reference multimedia objects, ~~this type(s), by said step of defining the reference characteristics comprising:~~

measuring a physical characteristic of ~~on this entire the~~ group of multimedia objects~~[[,]]~~; and by

obtaining at least one ~~or more~~ reference value values for this the measured characteristic, ~~this (these) said at least one~~ reference value being value(s) ~~will then be~~ used to define the probability of membership relation to the type of said plural

reference multimedia objects as a value ~~with~~ to which ~~[[a]]~~ the measurement ~~on an~~ of the at least one physical characteristic of the unknown object is compared to ~~deduce~~ determine the probability of membership to the type of said plural reference multimedia objects.

3. (Currently Amended) ~~Method~~ The method according to claim 2, ~~characterized in that~~ further comprising the step of:

~~performing an automatic search~~ the group of multimedia objects is ~~provided in an automatic search step~~ in an information system with an Internet downloader and an Internet search engine to provide the group of multimedia objects.

4. (Currently Amended) ~~Method~~ The method according to ~~any one of the above claims~~ claim 1, ~~characterized in that it includes~~ further comprising a the preliminary step consisting of:

~~taking a set of descriptive objects and~~ measuring a frequency of simultaneous occurrence of types of said plural reference multimedia object in ~~these a set of descriptive objects and thus deducing to determine~~ the existence of an affinity between at least two types of said plural reference multimedia objects when the types of said plural reference multimedia objects have a specific simultaneous rate of occurrence.

5. (Currently Amended) ~~Description~~ The method according to ~~any one of the above~~ claims claim 1, ~~characterized in that it includes~~ further comprising the step consisting of:

recognizing ~~making a shape recognition on~~ of the unknown multimedia object (F) ~~[[,]]~~;

wherein at least one reference shape of the unknown multimedia object to be recognized ~~on the unknown object making up~~ comprises a physical characteristic belonging to ~~the~~ a definition of one of the types of said plural reference multimedia objects.

6. (Currently Amended) ~~Method~~ The method according to claim 5, ~~characterized in that~~ wherein the shape ~~recognition~~ recognizing step includes a similarity measurement between a determined shape ~~determined on~~ of the unknown multimedia object and the at least one reference shape, and ~~also includes the use~~ utilization of a predefined relation giving which provides a probability (G) of membership of the unknown multimedia object to the type of said plural reference multimedia objects as a function of the shape similarity measurement made between the determined shape of the unknown multimedia object and the at least one reference shape.

7. (Currently Amended) The method according to ~~any one of the above~~ claims claim 1, ~~characterized in that~~ wherein the at least one type of physical characteristic of the unknown multimedia object includes ~~several~~ a plurality of reference characteristics; (E1, E2), ~~and in that~~

wherein at least two measurements are ~~made~~ performed on the unknown multimedia object to ~~make~~ generate a proximity measurement with each of ~~the~~ said plural ~~two~~ reference characteristics; ~~[[,]]~~ and in that

the probability of membership ~~to this in the~~ type of reference

characteristics is ~~made~~ performed using at least two relations, each giving providing a probability of membership to the type of reference characteristics as a function of the a proximity to a different characteristic;[[,]] and ~~in that~~

wherein the at least two probability relations are used to set up a resulting resultant global probability of membership of the object to the ~~considered~~ type of reference characteristics considered.

8. (Currently Amended) ~~Method~~ The method according to ~~the above~~ claim 7, ~~characterized in that wherein~~ the at least two relations for which each provide the probability of membership to the type of reference characteristics are used ~~according to~~ in accordance with a combinational fuzzy logic technique to provide ~~the a resulting~~ the resultant global probability of membership of the unknown multimedia object to the type of reference characteristics considered.

9. (Currently Amended) ~~Method~~ The method according to ~~any one of the above claims~~ claim 1, characterized in that a further comprising the step of:

implementing fuzzy logic technique ~~is used consisting of~~ comprising a mechanism that ~~gives~~ provides a single probability of membership to a reference type of characteristic starting from a combination of similarity probabilities with different characteristics to the reference type of characteristic.

10. (Currently Amended) ~~Automatic description~~ A device for automatically providing a description of an unknown multimedia object in which the unknown object is associated with ~~several types~~ a plurality of reference multimedia objects ~~each time with depending on~~ a probability of membership to ~~the~~ a considered type of said plural reference multimedia objects (G), the device ~~including comprising~~:

means ~~of~~ for measuring at least one physical characteristic ~~on~~ of the unknown object (F) and comparing it ~~the~~ at least one physical characteristic on of the unknown object with measurements of characteristics which best represent ~~representing the reference types~~ each type of said plural reference multimedia objects; ~~the device also including~~

means for using at least one probabilistic relation for each type of said plural reference multimedia objects to provide giving a probability that the unknown multimedia object is a member of membership to the type of said plural reference multimedia objects considered ~~as a function of the~~ based on a result of the comparison of the at least one measure physical characteristics of the unknown object to the measurements of the characteristics which best represent each type of said plural reference multimedia objects; ~~and the type, the device also including~~

means for electing multimedia objects having memberships in each type of said plural reference multimedia objects which form a majority of probabilities associated with each type of said plural reference multimedia objects considered and which are co-designated by an associated affinity relation of using obtained probabilities that the unknown multimedia objects are members of membership to the different types of said plural reference multimedia objects ~~thus obtained~~ in

combination with a series of affinity relations between each type of said plural reference multimedia objects types, ~~so as to elect (H) memberships that are majority in probability and are also co-designated by their affinity relation, so as to exclude~~ such that multimedia objects having memberships in the type of said plural reference multimedia objects having with a lower affinity with to the elected multimedia objects in the type of plural reference multimedia objects types are excluded.

11. (Currently Amended) ~~Device~~ The device according to claim 10, ~~characterized in that it includes~~ further comprising:

processing means for ~~making use of several~~ utilizing a plurality of groups of reference multimedia objects (B, C), each of said plural groups providing a group best representation of representing its a corresponding type of said plural reference multimedia objects, ~~these said~~ processing means ~~also being designed configured~~ to measure at least one physical characteristic for an entire group considered, and for deriving a reference measurement for this the at least one physical characteristic for the entire group considered from the at least one physical characteristic, it, this the derived reference measurement then being used in the definition of the being utilized to define a relationship providing relation giving a probability of membership to the type of said plural reference multimedia objects considered[[.]] as a measurement ~~with to~~ to which the device compares a measurement ~~on of~~ of an unknown object to ~~deduce~~ determine the probability of membership to the type of said plural reference multimedia objects considered,
(C)[[.]]

12. (Currently Amended) ~~Device~~ The device according to ~~either claim 10 or 11,~~
~~characterized in that it includes~~ further comprising:

~~means of carrying out a preliminary step consisting of~~ for preliminarily
~~taking a set of descriptive objects and~~ measuring a frequency of occurrence of
types of said plural reference multimedia object in ~~these~~ a set of descriptive
objects, and ~~then~~ for determining ~~if there is an existence of an~~ affinity between at
least two types of said plural reference multimedia objects when ~~these~~ types of
said plural reference multimedia objects have a ~~particular~~ specific simultaneous
rate of occurrence.

13 ~~12.~~ (New) The device according to claim 11, further comprising:

means for preliminarily measuring a frequency of occurrence of types of
said plural reference multimedia object in a set of descriptive objects, and for
determining an existence of an affinity between at least two types of said plural
reference multimedia objects when types of said plural reference multimedia
objects have a specific simultaneous rate of occurrence.